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ABSTRACT

The basic purpose of this study was to measure cognitive similarity, and to test the hypothesis that the cognitive organization of a child (normal or schizophrenic) is more like that of his own parents than it is like that of randomly chosen, unrelated adults. Thirty-six matched family triads, half with sons hospitalized for a schizophrenic reaction and half with sons hospitalized for medical reasons, comprised the sample. All families were administered the S-D and the Shipley-Hartford Vocabulary Test. Data analyses were conducted. Results support the assumption that, for schizogenic families, members of the same family are similar where cognitive organization is concerned. Their cognitive structure is idiosyncratic and not shared by others. It is suggested that children raised in normal families learn generalized, socially shared ways of construing other people and the world around them. As a result, they are cognitively more like members of constructed, unrelated "families" who share these more general world-views. (TL)

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Cognitive Similarity in Normal and Schizogenic Families[1]

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1. Title — Cognitive similarity in normal and schizogenic families

2. Problem

Family oriented theories of schizophrenia (e.g., Bateson, Jackson, Haley & Weakland, 1956; Lidz, Fleck & Cornelison, 1965; Wynne & Singer, 1963) tend to assume that in some fashion or other parents transmit disordered modes of thinking to their offspring. Assuming that the laws of learning apply to all human beings, then families should produce either normal or schizophrenic children as a function (in part) of the organization of parental thought. Thus, members of the same family--whether normal or not--should share a basic style or structure of thinking. From the transactions within the family a "family world-view" should emerge, which is reflected in the cognitive organization of each family member. In this view a normal child learns normal modes of thinking from normal parents in the same way that a schizophrenic learns disordered ways of thinking from his parents.

The basic purpose of this study was to attempt to measure cognitive similarity, and to test the hypothesis that the cognitive organization of a child (normal or schizophrenic) is more like that of his own parents than it is like that of randomly chosen, unrelated, adults.

3. Subjects

The S's were 36 family triads (father, mother

and adolescent son). Half the families had sons hospitalized for a schizophrenic reaction, while the other half had sons hospitalized for medical-surgical reasons. The Ss were matched on the variables of age, socioeconomic class, family size, birth-order of the sons, estimated verbal IQ, and test-retest reliability of the semantic differential (S-D).

4. Procedure

All families were seen together in their own homes. The S-D and Shipley-Hartford Vocabulary Test were administered to each family member. One week later a shortened version of the S-D was given in order to obtain test-retest reliability estimated for each S.

The S-D contained 21 scales (representing seven factors) taken from the work of Ware and Osgood (Osgood, 1962) on the "person differential". The S rated people known to him who fit each of 12 roles (e.g., self, mother, father, friend, enemy, doctor, etc.), on each of the 21 scales. A scale-by-scale correlation matrix was calculated for each S.

The individual rs from the upper triangle of the S-D matrix for each S were treated as scores and entered into a subject-by-subject matrix of cosines. The cosine between any two individual's S-D matrices was taken as an index of similarity of conceptual structure for those two individuals. The cosine reflects both the ordinal relation between two sets of scores and the closeness of the origins or means of the two sets: an uncentered correlation.

The average cosine between members of real and of constructed families was computed. Constructed families were composed of a father, mother and son drawn at random: so that no member of a constructed family was actually related to any other member of that "family."

5. Results

Comparing the average cosine (uncentered correlation)within real families to that within arbitrarily "made up" families the difference significantly favors the real families (t = 2.03, p =<.05), thus supporting the hypothesis that real families are more similar to each other than constructed families. However, when we turn to the specific hypothesis of the son's relation to his parents we find that the average Mother-Son + Father-Son similarity for real vs. constructed families just falls short of significance (using a one-tailed test, t = 1.52, $p \leqq .06$). When these differences are broken down for schizophrenic vs. normal sons, however, an interesting difference emerges. For the normal sons it seems to make no difference whether they are paired with their own or with randomly chosen parents (t = 0.25, p = .80). It is in the schizogenic families that the difference occurs. Schizophrenic sons are significantly more like their own parents than they are like randomly chosen schizogenic parents (using a one-tailed test, t = 1.87, p = .03). Normal parents teach normal, socially shared cognitive organization, whereas schizogenic parents teach idiosyncratic cognitive organization to their sons.

6. Discussion

The data tends to support the assumption that members of the same family are more like each other cognitively than are members of constructed (unrelated) "families." This effect is significantly seen, however, only in the schizogenic sample. This suggests that children raised in normal families learn generalized, socially shared ways of construing other people. To the extent that the parents are representative of the culture, there will be little difference in the cognitive structure of their child and that of any other parents who are also representative of the culture. The child in the normal home learns from his parents a way of seeing others which is shared by most other people in his culture.

The same mechanism holds for the child growing up in the schizogenic home. He too learns from his parents a way of construing other people. However, the cognitive structure he learns is not shared by others. It is idiosyncratic to his own home. The schizophrenic child seems to learn an idiosyncratic cognitive structure from his parents just as the normal child learns a generalized, socially shared cognitive organization from his parents.

In the normal sample (using the cosine data) the real parents are more like each other than they are like other unrelated adults ($t = 2.19$, $p = .03$). In the schizogenic sample, however, the real parents are not significantly more like each other than they are like unrelated adults ($t = 1.00$, $p = .32$). Normal parents seem to share some unique ways of organizing social perceptions, while schizogenic parents do

not. Impressionistically, the normal parents were more "with each other," could communicate better, than the schizogenic parents. People who share common ways of construing the world communicate better (Kelly, 1955; Triandis, 1959). If we assume that cognitive similarity facilitates communication, then the present data suggest that the schizophrenic child can communicate with each of his parents, but that they cannot easily relate to each other. This would fit with Lidz's description of the disruption of generational boundaries in the schizogenic home.

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